NAME	Dr. Amit Kumar Chaurasia	
DESIGNATION	Assistant Professor-I	
EMAIL ID	akchaurasia@amity.edu	
CONTACT NUMBER	91-9415853361, +91-7500012557	
RESEARCH INTERESTS	Microbial Electrolysis Cell enzyme/catalysts, Development, Wa Conversion, resources recovery from y	aste to Energy

**EDUCATIONAL OUALIFICATIONS:** 

No. of B.Tech. Students supervised:

Name of College / University	Degree	Year
UPTU Lucknow	B. Tech (Biotechnology)	2011
NIT Jalandhar	M. Tech (Chemical	2015
IIT Roorkee	Engineering)	
	Ph.D. (Chemical Engineering)	2021

# Title of Ph.D. thesis: Biohydrogen Production Using Electrodeposited Cathodes in Microbial Electrolysis Cells

EXPERIENCE (in chronological order): Total 20 Years Research & Teaching Designation Type of post held Name of the Institute Year (From – To) (teaching/research) MVJ College of Engineering, Bangalore, Assistant India Teaching/research Professor 18/07/2022-07/01/2023 Research Research Associate Alchemi Carbons Noida, India 10/12/2018-25/03/2022 Teaching assistant (3 Courses, 40h, 2 **Teaching** assistant credit) 2017-2019 NPTEL-IITR Lab Processing Thyrocare Technologies Limited Executive Navi Mumbai Research 24/12/2012-30/07/2013 Science communicat VASCSC Ahmadabad Gujarat **Teaching** or 27/05/2012-22/12/2012 Nil No. of Ph.D. students supervised Nil No. of Post-Doc Nil No. of M.Tech. Students supervised: Nil

Nil

## PUBLICATIONS (mention total no. here)

#### Details:

- 1. Rani, M., Shanker, U. and Chaurasia, A.K., 2017. Catalytic potential of laccase immobilized on transition metal oxides nanomaterials: degradation of alizarin red S dye. Journal of environmental chemical engineering, 5(3), pp.2730-2739.
- https://doi.org/10.1016/j.jece.2017.05.026
  - **2.** Chaurasia, A.K., Goyal, H. and Mondal, P., 2020. Hydrogen gas production with Ni, Ni–Co and Ni–Co–P electrodeposits as potential cathode catalyst by microbial electrolysis cells. International Journal of Hydrogen Energy, 45(36), pp.18250-18265.

#### https://doi.org/10.1016/j.ijhydene.2019.07.175

**3. Chaurasia, A.K.** and Mondal, P., 2021. Enhancing biohydrogen production from sugar industry wastewater using Ni, Ni–Co and Ni–Co–P electrodeposits as cathodes in microbial electrolysis cells. **Chemosphere**, 286(3), pp.131728.

#### https://doi.org/10.1016/j.chemosphere.2021.131728

**4.** Chaurasia, A.K., Ravi Shankar and P. Mondal, 2021. Effects of Ni, Ni-Co and Ni-Co-P electrodeposits as cathodes for enhancing hydrogen production in MEC using real paper industry effluent. **Journal of Environmental Management**, (298) 113542.

#### https://doi.org/10.1016/j.jenvman.2021.113542

**5. Chaurasia, A.K.**, Puneet Siwach, Ravi Shankar, and Prasenjit Mondal. 2021. Effect of pre-treatment on mesophilic anaerobic co-digestion of fruit, food and vegetable waste. **Clean Technologies and Environmental Policy**, 1-14.

### https://doi.org/10.1007/s10098-021-02218-5

- **6. Chaurasia, A.K.**, Puneet Siwach, and Prasenjit Mondal. 2021. Effectiveness of the pretreatment methods on mesophilic anaerobic co-digestion of fruit, food and vegetable waste. <a href="https://doi.org/10.21203/rs.3.rs-157978/v1">https://doi.org/10.21203/rs.3.rs-157978/v1</a>
- 7. Chaurasia, A.K., Thakur, L. S., The Role of Bio-Electrochemical System for Hydrogen Generation. Progress Petrochem Sci. 4(3). PPS. 000589. 2022. <a href="https://doi.org/10.31031/PPS.2022.04.000589">https://doi.org/10.31031/PPS.2022.04.000589</a> (ISSN: 2637-8035)
- 8. Thakur, L. S., Parmar, H., Varma, A. K., Chaurasia, A. K., & Mondal, P. (2022). Removal of manganese from synthetic wastewater by Vetiveria zizanioides. Materials Today:

  Proceedings. https://doi.org/10.1016/j.matpr.2022.08.395
- 9. Kachroo H., Chaurasia A.K., Chaurasia S.K., Yadav V.K. (2022) Sustainable Clean Energy Production from the Bioelectrochemical Process Using Cathode as Nanocatalyst. In: Shanker U., Hussain C.M., Rani M. (eds) Handbook of Green and Sustainable Nanotechnology. Springer, Cham.

#### https://doi.org/10.1007/978-3-030-69023-6\_58-1

- 10. Chaurasia, A.K., Mohapatra, S., Shankar, R. and Thakur, L.S., 2022. Technologies for the Clean and Renewable Energy Production for the Sustainable Environment. In Clean Technologies and Sustainable Development in Civil Engineering (pp. 141-178). IGI Global. https://doi.org/10.4018/978-1-7998-9810-8.ch007
- **11.** Chaurasia, A.K. and Mondal, P. 2021. Hydrogen production from waste and renewable resources." In Hydrogen Fuel Cell Technology for Stationary Applications, 22-46. **IGI Global**. <a href="https://doi.org/10.4018/978-1-7998-4945-2.ch002">https://doi.org/10.4018/978-1-7998-4945-2.ch002</a>
- 12. Chaurasia, A.K. and Mondal, P. 2020. Simultaneous Removal of Organic Load and Hydrogen Gas Production Using Electrodeposits Cathodes in MEC. In Advances in Renewable Hydrogen and Other Sustainable Energy Carriers, pp. 263-269. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-15-6595-3-34">https://doi.org/10.1007/978-981-15-6595-3-34</a>

PATENTS (total no.)	13. A. Kadier, Chaurasia, A.K., S.M. Sapuan, R.A. I, Jayesh M. Sonawane, M. S Kalil, P. K. Rai, W. Logroño, H. A. Hasan and A. A. Hamid. 2020. Essential Factors for Performance Improvement and the Implementation of Microbial Electrolysis Cells (MECs), Springer, Singapore, pp. 139-168.  https://doi.org/10.1007/978-981-15-6872-5_7  14. Shankar, R., Pathak, N., Chaurasia, A. K., Mondal, P., & Chand, S. 2017. Energy Production through Microbial Fuel Cells. Sustainable Utilization of Natural Resources, 353. https://doi.org/10.1201/9781315153292  15. Mondal, P., Kumari, P., Singh, J., Verma, S., Chaurasia, A. K., & Singh, R. P. 2017. Oil from Algae. Sustainable Utilization of Natural Resources, 213. https://doi.org/10.1201/9781315153292  Details: Chaurasia, A.K Johri, P, "A portable assembly for providing treatment of hazardous material in oxygen rich environment and method thereof" Application no. 202241052874 (15th September 2022).
RESEARCH PROJECTS	
Completed: (total no.)	Details:Nil
Ongoing: (total no.)	D . 7
AWARDS & HONOURS/ DISTINCTIONS	<ul> <li>Details:         <ul> <li>Technical Committee member at ICCBS2023, Japan</li> <li>Selected as institute Postdoctoral Fellow at IIT Kanpur.</li> <li>A Grade in PhD Thesis from Examiner (France), 2021</li> <li>Amit Kumar Chaurasia, P. Mondal, Best Oral Awards on "Simultaneousin MEC", CCC, 12-13 October 2019, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar Indian.</li> <li>Got financial support from SERB-DST Govt. of India, to participate in "3rd International Symposium on Sustainable Hydrogen, Algiers Algeria (27-28 November 2019).</li> <li>Got financial support from IIT Roorkee India-Alumni, to participate in International Conference (SEGT-2019) in Bangkok, Thailand in 2019.</li> <li>Received Institute Fellowship by IIT Roorkee for pursuing Doctor of Philosophy (2015-2020).</li> <li>Received GATE Fellowship to pursue M. Tech (July 2013 to June 2015).</li> <li>Qualified GATE 2013 in Biotechnology with Gate Score 343.</li> </ul> </li> </ul>
MEMBERSHIP with Professional/ Academic bodies	<ul> <li>Details:         <ul> <li>Managing Editor of Journal of Biomedical and Life Sciences since 2022.</li> <li>https://www.scipublications.com/journal/index.php/jbls/editors</li> <li>Editorial member of Advances in Bioscience and Bioengineering journal since 2022.</li> <li>Senior Member of Hong Kong Chemical, Biological &amp; Environmental Engineering Society (HKCBEES: 101865).</li> <li>Member of International Chemical Biology Society, USA since 2021 (https://www.chemical-</li> </ul> </li> </ul>

	<ul> <li>biology.org/members/)</li> <li>Session Chair, Scientific and organizing member at 9th ICCBS 2022, Tokyo, Japan.</li> <li>Scientific and organizing committee member at ICRS,22, Istanbul, Turkey</li> </ul>
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